

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A light emitting apparatus comprising a light emitting device comprising:

an anode over a substrate having an insulation surface;

an EL layer which is in contact with the anode; and

a cathode which is in contact with the EL layer,

wherein the EL layer includes an organic compound in which electro luminescence is obtained, and

wherein the EL layer includes silicon, with 1×10^{18} - 5×10^{20} ~~pieces/cm³~~ atoms/cm³ by SIMS measurement.

2-26. (Canceled)

27. (Currently Amended) The light emitting apparatus according to claim 1,

wherein the silicon is included as SiH_x [[, and]]

~~wherein the numeral x is a natural number.~~

28. (Currently Amended) The light emitting apparatus according to claim 1,

wherein the silicon is included as SiO_x [[, and]]

~~wherein the numeral x is a natural number.~~

29. (Previously Presented) The light emitting apparatus according to claim 1, wherein the electro luminescence is fluorescence.

30. (Currently Amended) The light emitting apparatus according to claim 1, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine, and tris-8-quinolinoaluminum complex a metal complex including a quinoline bone structure, a metal complex including a benzoxazole bone structure, and a metal complex including a benzothiazole bone structure.

31. (Previously Presented) The light emitting apparatus according to claim 1, further comprising a thin film transistor over the substrate and electrically connected to the anode.

32. (Currently Amended) A light emitting apparatus comprising a light emitting device comprising:

an anode over a substrate having an insulation surface,

an EL layer which is in contact with the anode; and

a cathode which is in contact with the EL layer,

wherein the EL layer includes a host material and a dopant material,

wherein the dopant material is an organic compound in which electro luminescence is obtained, and

wherein the EL layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ atoms/cm³ by SIMS measurement.

33. (Currently Amended) The light emitting apparatus according to claim 32,

wherein the silicon is included as SiH_x [[, and]]

~~wherein the numeral x is a natural number.~~

34. (Currently Amended) The light emitting apparatus according to claim 32,

wherein the silicon is included as SiO_x [[, and]]

wherein the numeral x is a natural number.

35. (Previously Presented) The light emitting apparatus according to claim 32, wherein the electro luminescence is fluorescence.

36. (Currently Amended) The light emitting apparatus according to claim 32, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino)triphenylamine, and tris-8-quinolinoaluminum-complex a metal complex including a quinoline bone structure, a metal complex including a benzoxazole bone structure, and a metal complex including a benzothiazole bone structure.

37. (Previously Presented) The light emitting apparatus according to claim 32, further comprising a thin film transistor over the substrate, electrically connected to the anode.

38. (Currently Amended) A light emitting apparatus comprising a light emitting device comprising:

an anode over a substrate having an insulation surface,

an EL layer which is in contact with the anode; and

a cathode which is in contact with the EL layer,

wherein the EL layer comprises:

a hole injection layer in contact with the anode;

a light emitting layer over the hole injection layer including an organic compound in which electro luminescence is obtained; and

an electron injection layer over the light emitting layer, and

wherein the light emitting layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ atoms/cm³ by SIMS measurement.

39. (Currently Amended) The light emitting apparatus according to claim 38, wherein the silicon is included as SiH_x , [[, and]]

~~wherein the numeral x is a natural number.~~

40. (Currently Amended) The light emitting apparatus according to claim 38, wherein the silicon is included as SiO_x , [[, and]]

~~wherein the numeral x is a natural number.~~

41. (Previously Presented) The light emitting apparatus according to claim 38, wherein the electro luminescence is fluorescence.

42. (Currently Amended) The light emitting apparatus according to claim 38, wherein the organic compound is one selected from the group consisted of 4,4'-bis(N-(naphthyl)-N-phenyl-amino)biphenyl, basecuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino)triphenyl amine, and tris-8-quinolinealuminum complex a metal complex including a quinoline bone structure, a metal complex including a benzoxazole bone structure, and a metal complex including a benzothiazole bone structure.

43. (Previously Presented) The light emitting apparatus according to claim 38, further comprising a thin film transistor over the substrate, electrically connected to the anode.

44. (Currently Amended) A light emitting apparatus comprising a light emitting device comprising:

an anode over a substrate having an insulation surface,
an EL layer which is in contact with the anode; and
a cathode which is in contact with the EL layer,
wherein the EL layer comprises:

a hole injection layer in contact with the anode;

a hole transport layer over the hole injection layer;
a light emitting layer over the hole transport layer, including an organic compound in which electro luminescence is obtained;
an electron transport layer over the light emitting layer; and
an electron injection layer over the electron transport layer, and
wherein the light emitting layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ atoms/cm³ by SIMS measurement.

45. (Currently Amended) The light emitting apparatus according to claim 44, wherein the silicon is included as SiH_x [[, and]]
~~wherein the numeral x is a natural number.~~

46. (Currently Amended) The light emitting apparatus according to claim 44, wherein the silicon is included as SiO_x [[, and]]
~~wherein the numeral x is a natural number.~~

47. (Previously Presented) The light emitting apparatus according to claim 44, wherein the electro luminescence is fluorescence.

48. (Currently Amended) The light emitting apparatus according to claim 44, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino) triphenylamine, and tris-8-quinolinolaluminum complex a metal complex including a quinoline bone structure, a metal complex including a benzoxazole bone structure, and a metal complex including a benzothiazole bone structure.

49. (Previously Presented) The light emitting apparatus according to claim 44, further comprising a thin film transistor over the substrate, electrically connected to the anode.

50. (Currently Amended) A light emitting apparatus comprising a light emitting device comprising:

an anode over a substrate having an insulation surface,

an EL layer which is in contact with the anode; and

a cathode which is in contact with the EL layer,

wherein the EL layer comprises:

a first functional region over the anode, including a first compound; and

a second functional region in contact with the first functional region, including a second organic compound in which electro luminescence is obtained, and

a mixed region between the first functional region and the second functional region, including the first compound and the second organic compound,

wherein the mixed region includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ atoms/cm³ by SIMS measurement.

51. (Currently Amended) The light emitting apparatus according to claim 50,

wherein the silicon is included as SiH_x [[, and]]

~~wherein the numeral x is a natural number.~~

52. (Currently Amended) The light emitting apparatus according to claim 50,

wherein the silicon is included as SiO_x [[, and]]

~~wherein the numeral x is a natural number.~~

53. (Currently Amended) The light emitting apparatus according to claim 50, wherein the electro luminescence is fluorescence.

54. (Currently Amended) The light emitting apparatus according to claim 50, wherein ~~the organic compound~~ the second organic compound is one selected from the group consisted of

4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino)triphenyl-amine, and tris-8-quinolinoaluminum complex a metal complex including a quinoline bone structure, a metal complex including a benzoxazole bone structure, and a metal complex including a benzothiazole bone structure.

55. (Previously Presented) The light emitting apparatus according to claim 50, further comprising a thin film transistor over the substrate, electrically connected to the anode.